

APPENDIX A

1-131. (Canceled)

132. (Currently Amended) A method of processing digital data using a digital data processing apparatus, the digital data processing apparatus including a receiver and a descrambler, the method comprising:

receiving, by the receiver of the digital data processing apparatus, one or more scrambled data units and a control data, the control data being used for controlling a parameter of a scrambling/descrambling operation and the same control data being used for one or more succeeding data units; and -

descrambling, by the descrambler, the one or more scrambled data units and the one or more succeeding data units based on the same control data, each of the one or more scrambled data units and the one or more succeeding data units including scrambled digital video data or scrambled digital audio data,

wherein the same descrambler is used to descramble both the scrambled digital video data and the scrambled digital audio data.

133. (Currently Amended) The method of claim 132, wherein the control data is used to initialize thea descrambler for performing the descrambling operation, and

wherein the descrambling step includes initializing the descrambler based on the control data.

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134. (Previously Presented) The method of claim 132, wherein the digital data comprises a plurality of data blocks including a first data block, each data block including one data unit and a header, at least the header in the first data block including the control data, and

wherein the descrambling step descrambles the data unit except for the header.

135. (Previously Presented) The method of claim 132, wherein the control data is changed or refreshed periodically, and

wherein the descrambling step descrambles one or more succeeding data units based on the changed or refreshed control data.

136. (Previously Presented) The method of claim 132, wherein at least two scrambled data units and a header including the control data comprise one data group, the header including the control data, and

wherein the method further comprises:

demultiplexing the at least two scrambled data units and the header from one data group before the descrambling step.

137. (Previously Presented) The method of claim 136, wherein the data group includes at least two packets, at least first packet including the header, and

wherein the demultiplexing step demultiplexes the at least two packets from one data group.

138. (Previously Presented) The method of claim 132, wherein the descrambling step descrambles the digital data in such a manner that the digital data is not protected.

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139. (Previously Presented) The method of claim 132, wherein the receiving step further receives copy prevention information, the copy prevention information including one of current generation information and allowable generation information, the current generation information indicating a number of times the digital data has been copied and the allowable generation information indicating a number of permitted copies of the digital data, and

wherein the method further comprises:

performing a copy prevention function such that copying of digital data is not permitted if the copy prevention information indicates that copying of digital data is not permitted.

140. (Previously Presented) The method of claim 139, wherein the descrambling step is performed only if the copy prevention information indicates that copying of digital data is permitted.

141. (Currently Amended) An apparatus for processing digital data, comprising:

a receiving part to receive a control data and one or more scrambled data units, the control data being used for controlling a parameter of a scrambling/descrambling operation and the same control data being used for one or more succeeding data units;

a descrambler to descramble the received one or more scrambled data units and one or more succeeding data units based on the same control data, each of the one or more scrambled data units and the one or more succeeding data units including scrambled digital video data or scrambled digital audio data,

wherein the same descrambler is used to descramble both the scrambled digital video data and the scrambled digital audio data; and

a controller, operatively coupled to the descrambler, to control the descrambling operation by the descrambler.

142. (Previously Presented) The apparatus of claim 141, wherein the control data is used to initialize the descrambler for performing the descrambling operation, and

wherein the controller is configured to initialize the descrambler based on the control data.

143. (Previously Presented) The apparatus of claim 141, wherein the digital data comprises a plurality of data blocks including a first data block, each data block including one data unit and a header, at least the header in the first data block including the control data, and

wherein the descrambler is configured to descramble each data unit except for the header in each data block.

144. (Previously Presented) The apparatus of claim 141, wherein the control data is changed or refreshed periodically, and

wherein the controller is configured to control the descrambler to descramble one or more succeeding data units based on the changed or refreshed control data.

145. (Previously Presented) The apparatus of claim 141, wherein at least two scrambled data units and a header including the control data comprise one data group, the header including the control data, and

wherein the apparatus further comprises:

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a demultiplexer to separate the at least two scrambled data units and the header from one data group before the descrambling.

146. (Previously Presented) The apparatus of claim 145, wherein the data group includes at least two packets, at least first packet including one data unit and the header, and

wherein the demultiplexer is configured to demultiplex the at least two packets from one data group.

147. (Previously Presented) The apparatus of claim 145, further comprising:

a detector to detect the header from the received data group and to detect the control data within the header.

148. (Previously Presented) The apparatus of claim 145, wherein the data group further includes copy prevention information, the copy prevention information including one of current generation information and allowable generation information, the current generation information indicating a number of times the digital data has been copied and the allowable generation information indicating a number of permitted copies of the digital data, and

wherein the controller is further configured to control a copy prevention function such that copying of digital data is not permitted if the copy prevention information indicates that copying of digital data is not permitted.

149. (Previously Presented) The apparatus of claim 141, wherein the descrambling of scrambled digital data by the descrambler is performed only if the copy prevention information indicates that copying of digital data is permitted.

150. (Currently Amended) A data storage medium accessible by a digital data processing apparatus including a descrambler, the data storage medium comprising:

one or more scrambled data units and control data stored on the data storage medium,
wherein the control data is used for controlling a parameter of a ~~scrambling~~/descrambling operation performed by the descrambler of the digital data processing apparatus, and the same control data is used for one or more succeeding data units,

wherein each of the one or more scrambled data units and the one or more succeeding data units includes scrambled digital video data or scrambled digital audio data stored on the data storage medium, and

wherein both the scrambled digital video data and the scrambled digital audio data are descrambled by the same descrambler.

151. (Currently Amended) The data storage medium of claim 150, wherein the control data is used to initialize ~~the descrambler~~a ~~scrambler~~ for performing the ~~descrambling~~~~scrambling~~ operation.

152. (Previously Presented) The data storage medium of claim 150, wherein the data storage medium includes a plurality of data blocks including a first data block, each data block including one data unit and a header, at least the header in the first data block including the control data, and

wherein each data unit is scrambled while the header is not scrambled, in each data block.

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153. (Currently Amended) The data storage medium of claim 150, wherein the control data is changed or refreshed periodically, and

wherein one or more succeeding data units are ~~descrambled~~scrambled based on the changed or refreshed control data.

154. (Previously Presented) The data storage medium of claim 150, wherein at least two packets comprise one data group, at least first packet including one scrambled data unit and a header, the header including the control data.

155. (Previously Presented) The data storage medium of claim 150, wherein one or more scrambled data units and control data comprise one data group, the data group further including copy prevention information, the copy prevention information including one of current generation information and allowable generation information, the current generation information indicating a number of times the digital data has been copied and the allowable generation information indicating a number of permitted copies of the digital data, and the copy prevention information being used for a copy prevention function in a reproducing/reproducing/recording apparatus such a manner that copying of digital data is not permitted if the copy prevention information indicates that copying of digital data is not permitted.